

POWERED BY
THE SUN



2007 SOLAR DECATHLON



THE NATIONAL MALL
WASHINGTON, D.C.
OCTOBER 12-20, 2007
www.solardecathlon.org

20 TEAMS, 10 CONTESTS, *and* WE ALL WIN

Originally conceived in 1999, the simple idea to test the power of the sun in 10 contests grew into one of the most ambitious and inspiring events in the country — the Solar Decathlon.

The 2007 Solar Decathlon challenges 20 college teams from around the globe in 10 contests to see which team can design, build, and operate the most livable and energy-efficient completely solar-powered house. And, while the competition will crown a first-place finisher, this truly is a competition we all win. Through their work, the students will demonstrate winning choices about living with abundance, style, and comfort using only the power of the sun. That's the promise of the Solar Decathlon.

The Competition

The 2007 Solar Decathlon will be the third competition sponsored by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy; its National Renewable Energy Laboratory; the American Institute of Architects; American Society of Heating, Refrigerating, and Air-Conditioning Engineers; National Association of Home Builders; U.S. Green Building Council; BP; and Sprint. With the support of the sponsors, the students are pursuing solar engineering and design excellence, and will prove that the time for solar energy is now!

Like the sensible dwellings from years gone by, today's solar houses connect with nature to take advantage of heat and light from the sun, as well as cooling breezes and shading. But these homes take those low-tech, natural advantages and crank them way up. Solar Decathlon homes combine proven design solutions with the latest high-tech products to create homes that not only reduce utility bills, but also meet their own energy needs while providing all the comforts of home.

In fall 2007, student teams will transport their completed solar homes from campus to the

National Mall in Washington, D.C., creating a "solar village" born of their imaginations and creativity. This village will show we can live our modern lifestyle, where we work hard, move fast, and demand convenience and comfort, while using less energy.

To deliver on that promise, the students will spend more than a year building their approximately 800-square-foot homes and preparing for the competition. During the competition, students will test their homes in contests encompassing all the ways we use energy in our daily lives. Contests evaluate architecture, market viability, comfort, how well the homes perform tasks such as heating water and powering appliances, and more. Each team must also provide enough solar electricity to power an electric car. The winner of the Solar Decathlon will be the team that best blends aesthetics and modern conveniences with maximum energy production and optimal efficiency.

Today's Students, Tomorrow's Leaders

While the sun is the namesake of the competition, the students and their amazing work are the cornerstone of the event. Today's students are tomorrow's engineers, architects, entrepreneurs, and homeowners — and the Solar Decathlon encourages them to incorporate solar energy into their future careers and personal lives.

Just like the Olympic decathletes, the students draw on all of their strengths, including design and architecture, engineering and performance, and education and promotion. The teams rely on expertise from all disciplines as they spend months fund raising, planning, designing, analyzing, and finally building and improving their homes. The future engineers will collaborate with the future architects to create houses that are designed not only to look beautiful, but to perform beautifully, too.

The Solar Decathletes have a big job ahead of them, and they will tackle the job with energy, ingenuity, and perseverance. The students will learn a tremendous amount from the competition and inspire the world to imagine a brighter future.



Capturing the Imagination of a Nation

While the Solar Decathlon is primarily a student competition, it is also a living laboratory where concept meets reality. In fall 2007, visitors are welcome to stroll through the solar village and see firsthand the solar energy and energy efficiency technologies available today.

Past Solar Decathlons, held in 2005 and 2002, attracted large and enthusiastic crowds, with more than 100,000 people visiting each competition. Testimonials included "Outstanding! The homes of the future are here today," and "Absolutely terrific display. There are some wonderful ideas here."

Visitors toured the solar village and learned strategies to reduce their consumption of fossil fuels and to lower their utility bills. Visitors also learned that using renewable energy sources such as solar can help increase domestic energy security.

Past competitions also attracted exceptional media attention and were covered by many of the nation's most distinguished and well-known media organizations. Solar Decathlon stories appeared in print, online, and on television and radio. Highlights included stories by CBS Evening News, Today on NBC, the *New York Times*, *Los Angeles Times*, *Washington Post*, *Washington Times*, *Popular Mechanics*, National Public Radio, and Sirius radio. The Solar Decathlon was also featured on five cable shows on Discovery Canada, DIY Network, HGTV, This Old House, and the New York Times TV/Discovery, varying from short features to full-length documentaries.

Also during past competitions, thousands of people visited the Solar Decathlon Web site each day (www.solardecathlon.org) to track their favorite team, view daily photos, and learn more about solar energy and energy efficiency.



the 2007 SOLAR DECATHLON TEAMS



- Carnegie Mellon University
- Cornell University
- Georgia Institute of Technology
- Kansas State University and University of Kansas
- Lawrence Technological University
- Massachusetts Institute of Technology
- New York Institute of Technology
- Santa Clara University
- Team Montréal – École de Technologie Supérieure, Université de Montréal, McGill University
- Technische Universität Darmstadt
- Texas A&M University
- The Pennsylvania State University
- Universidad de Puerto Rico, Río Piedras and Mayagüez
- Universidad Politécnica de Madrid
- University of Cincinnati
- University of Colorado at Boulder
- University of Illinois at Urbana-Champaign
- University of Maryland
- University of Missouri-Rolla
- University of Texas at Austin

FOR MORE INFORMATION

Web site: www.solardecathlon.org

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2005 WINNERS



1st Place
University of Colorado



2nd Place
Cornell University



3rd Place
California Polytechnic State University



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